

REMARKS

The Examiner rejected a number of claims 1 - 33 under 35 U.S.C. 103(a) as being unpatentable over by U.S. Patent 6,392,712 issued to Gryskiewicz that describes a system for synchronizing interlaced and progressive video signals in view of U.S. Patent 6,915,528 issued to McKenna that describes a system and method for managing television programs within an entertainment system and further in view of U.S. Publication 2003/0067552 issued to Leyvi that describes a system and method that allows a high bandwidth serial or parallel digital video broadcast data signal to be monitored on a low cost digital display device such as a computer monitor.

As discussed in the previous response, the primary reference (the '712 patent) only provides for the synchronization of incoming interlaced and progressive scan video signals to produce a single, interlaced video signal useful for display on an analog interlaced video display only. At no point does the '712 patent teach or even remotely suggest that the output interlaced video signal has been adjusted for the specific analog display based upon any display device characteristics (such as EDID). On the contrary, the only factors taken into consideration are parameters (such as whether or not the incoming video signals are progressive or interlaced, or the incoming speed) related only to the incoming video stream and not to any display characteristics.

In order to overcome the stated deficiencies of the '712 reference, the Examiner relies upon Leyvi. More specifically, the Examiner states that neither the '712 reference nor the '528 reference discloses basing conversion on a set of display attributes and in order to support the 103(a) rejection of claim 1, the Examiner refers to page 3 paragraph 0025 that describes a scan converter 150. The scan converter 150 is relied upon converts the scan format of a received digital video data signal to a scan format supported by the target digital display. Upon careful consideration, the Applicants respectfully disagree with the Examiner's conclusion for at least the

following reason. For example, what the Examiner refers to as the scan format is defined in paragraph 0024 as "the received digital video broadcast data signal may have any of a number of well known video scan formats, e.g., 1080 lines scanned in interlaced (1080i)..." which is the display resolution (number of pixels) that has nothing to do with an output frame rate which depends upon the source of the input video (network data is usually 15 fps, film source is 24 fps, progressive video is 30 fps, etc). Therefore, the scan converter 150 changes the resolution (scan format) of the incoming video signal to match that of the display device only and does nothing to modify the frame rate of the incoming video. At no point does Leyvi (or any of the other references) teach or suggest a output frame rate converter that selectively adjusts the output frame rate.

In contrast, the invention as recited in claim 1 specifically recites language that describes a frame rate converter that selectively synchronizes the output frame rate. More specifically,

A configurable real time video processor arranged to provide a single synchronized display video stream having a single display video format to a display unit having an associated set of display attributes from a number of video streams of different video formats, comprising:

a number of ports each of which is configured to receive one of the video streams at a corresponding input video stream clock rate;

a number of adaptive image converter units each coupled to an associated one of the ports for converting the corresponding input video data stream to a corresponding converted video stream having the single display video format that is based upon the set of display attributes; and

a frame rate conversion unit configured to synchronize each converted data stream to a selected output frame rate .

Since none of the cited secondary references taken in any combination with the '712 reference teach or remotely suggest a frame rate conversion unit that synchronizes each of the incoming video signals (each with their own clock rates) to a selected output frame rate. For example, an output frame rate can be selected to be 60 fps whereas the input video data clock rates can be 15 fps (for the case of network data) or 24 fps for film and 30 fps for progressive video all of which will be synchronized to 60 fps in this example. Therefore, the Applicants

believe that claim 1 is not rendered obvious and is therefore allowable and request that the Examiner withdraw the rejection thereof.

All of the remaining independent claims recite essentially the same limitations, as does claim 1 and are therefore also believed to be allowable for at least the reasons stated for claim 1 above.

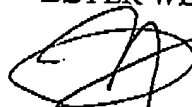
All dependent claims depend either directly or indirectly from independent claims 1, 12 and 23 and are also believed to be allowable.

CONCLUSION

The Applicants believe that claims 1 - 33 are allowable in view of the remarks above. Should the Examiner believe that a further telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,

BEYER WEAVER & THOMAS, LLP



Michael J. Ferrazano
Reg. No. 44,105

P.O. Box 70250
Oakland, CA 94612-0250
(650) 961-8300